

Appendix A

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

1 - 27 (Canceled)

28. (Currently amended) An integral ceramic filter assembly produced by adhering with a ceramic seal layer outer surfaces of a plurality of filters, each of which is formed from a sintered ~~porous ceramic body~~ α -type silicon carbide, wherein the seal layer has a thickness of 0.3 to 3 mm and a thermal conductance of 0.1 to 10 W/mk.

29. (Previously presented) The ceramic filter assembly according to claim 28, wherein the filter has an average porosity of 30 to 70%.

30. (Previously presented) The ceramic filter assembly according to claim 28, wherein the filter has a thermal conductance of 20 to 80 W/mk.

31. (Previously presented) The ceramic filter assembly according to claim 28, wherein the filter has a thermal

conductance of 20 to 80 W/mk and an average porosity of 30 to 70%.

32. (Previously presented) The ceramic filter assembly according to claim 28, wherein the seal layer includes 3 to 80 wt% of inorganic grains.

33. (Previously presented) The ceramic filter assembly according to claim 28, wherein the assembly is a diesel particulate filter.

34. (Cancelled)

35. (Previously presented) The ceramic filter assembly according to claim 28, wherein the filter has a plurality of cells, and each cell has an outer surface which carries at least one oxide catalyst selected from a platinum group element, other metal elements and oxides of these metal elements.

36. (Previously presented) The ceramic filter assembly according to claim 28, wherein the assembly has an outer form in a round cross-section or oval cross-section

37. (Previously presented) An exhaust gas purification apparatus having the ceramic filter assembly according to claim 28 arranged in a casing that is located in an exhaust gas passage of an internal combustion engine.

38. (Currently amended) An integral ceramic filter assembly produced by adhering with a ceramic seal layer outer surfaces of a plurality of elongated honeycomb filters, each of which is formed from a sintered ~~porous ceramic body~~ α -type silicon carbide, wherein a ratio L/S between a filter length L in a flow direction of a processed fluid and a filter cross-section S in a direction perpendicular to the flow direction is 0.06 to 0.75 mm/mm².

39. (Previously presented) The ceramic filter assembly according to claim 38, wherein the filter length is 167 to 300 mm.

40. (Previously presented) The ceramic filter assembly according to claim 38, wherein the assembly is a diesel particulate filter.

41. (Previously presented) The ceramic filter assembly according to claim 38, wherein the filter is formed from a sintered porous silicon carbide body.

42. (Previously presented) The ceramic filter assembly according to claim 38, wherein the filters are offset from one another in a direction perpendicular to a filter axial direction.

43. (Previously presented) The ceramic filter assembly according to claim 38, wherein the filter has a plurality of cells, and each cell has an outer surface which carries at least one oxide catalyst selected from a platinum group element, other metal elements and oxides of these metal elements.

44. (Previously presented) An exhaust gas purification apparatus having the ceramic filter assembly according to claim 38 arranged in a casing that is located in an exhaust gas passage of an internal combustion engine.

45. (Currently amended) An elongated honeycomb filter formed from a sintered ~~porous ceramic body~~ α -type silicon carbide, the honeycomb filter having a ratio L/S between a filter length L in a flow direction of a processed fluid and a filter cross-section S in a direction perpendicular to the flow direction is 0.06 to 0.75 mm/mm².

46. (Previously presented) The ceramic filter assembly according to claim 45, wherein the filter has a plurality of cells, and each cell has an outer surface which carries at least one oxide catalyst selected from a platinum group element, other metal elements and oxides of these metal elements.

47. (Previously presented) The ceramic filter assembly according to claim 45, wherein the form of the filter is a triangular pole-like shape or a hexagonal pole-like shape.

48. (Previously presented) The ceramic filter assembly according to claim 45, wherein the filter length is 167 to 300 mm.

49. (Previously presented) An exhaust gas purification apparatus having the ceramic filter assembly according to claim 45 arranged in a casing that is located in an exhaust gas passage of an internal combustion engine.

50. (Currently amended) A honeycomb filter formed from a sintered ~~porous ceramic body~~ silicon carbide having impurities of less than 5 wt%, wherein the average pore diameter of the honeycomb filter is 5 to 15 μ m, the average

porosity is 30 to 50%, and the honeycomb filter has 20% or more of through pores.

51. (Previously presented) The honeycomb filter according to claim 50 comprising a plurality of cells including a first cell having a first end surface sealed by a sealing body and a second cell adjacent to the first cell, the second cell having a second end surface that is opposite to the first surface, the second end surface being sealed by a sealing body, wherein the cell number per square inch is 120 or more, and the thickness of a cell wall defining the cells is 0.46mm or less.

52. (Previously presented) The honeycomb filter according to claim 50, wherein the sintered porous ceramic body is one selected from silicon carbide, silicon nitride, sialon, alumina, cordierite and mullite.

53. (Previously presented) The honeycomb filter according to claim 50, wherein the filter has a plurality of cells, and each cell has an outer surface which carries at least one oxide catalyst selected from a platinum group element, other metal elements and oxides of these metal elements.

54. (Cancelled)

55. (Previously presented) The honeycomb filter according to claim 50, wherein the impurities of the silicon carbide is Al, Fe, O or free C.

56. (Previously presented) The honeycomb filter according to claim 50, wherein the total volume of the filter is 1/4 to 2 times the total displacement of an internal combustion engine.

57. (Previously presented) An exhaust gas purification apparatus having the honeycomb filter according to claim 50 arranged in a casing that is located in an exhaust gas passage of an internal combustion engine.

58. (Currently amended) A honeycomb filter for purifying a high temperature exhaust gas, the filter having a plurality of cells where each cell is defined by a cell wall, and ~~purifying fluid including particulates with the cell wall,~~ wherein the specific surface area of grains forming the cell wall is 0.1 m²/g or more.

59. (Previously presented) The honeycomb filter according to claim 58, wherein the cell wall is formed from a sintered silicon carbide body.

60. (Previously presented) The honeycomb filter according to claim 58, wherein the cell wall is formed from a porous body.

61. (Previously presented) The honeycomb filter according to claim 58, wherein the filter has a plurality of cells, and each cell has an outer surface which carries at least one oxide catalyst selected from a platinum group element, other metal elements and oxides of these metal elements.

62. (Previously presented) The honeycomb filter according to claim 58, wherein the average pore diameter of the honeycomb filter is 1 to 50 μ m.

63. (Previously presented) The honeycomb filter according to claim 58, wherein the average porosity of the honeycomb filter is 30 to 70%.

64. (Previously presented) The honeycomb filter according to claim 58, wherein the cell density is 120/inch² or greater.

65. (Previously presented) The honeycomb filter according to claim 58, wherein the thickness of the cell wall is 0.46mm or less.

66. (Previously presented) The honeycomb filter according to claim 58, wherein the honeycomb filter has 20 % or more of through pores.

67. (Previously presented) The honeycomb filter according to claim 58, wherein a specific surface area of the grains forming the cell wall of the honeycomb filter is 0.1 to 1.0 m²/g.

68. (Previously presented) The honeycomb filter according to claim 58, wherein a specific surface area of the grains forming the cell wall of the honeycomb filter is 0.3 to 0.8 m²/g.

69. (Previously presented) An exhaust gas purification apparatus having the honeycomb filter according to claim 58 arranged in a casing that is located in an exhaust gas passage of an internal combustion engine.

70. (New) An integral ceramic filter assembly having an axial direction and comprised of a plurality of filters, each filter having an outer surface, and comprised of a ceramic seal layer that adheres the outer filter surfaces to each other thereby so as to produce said integral assembly, said filters being offset from each other in a direction

perpendicular to said filter assembly axial direction, and
said seal layer has a thickness of 0.3 mm to 3 mm and a
thermal conductance of 0.1 W/mK to 10 W/mK.